

# FOR COST ESTIMATING December 2010

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APPROVED:

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12/29/2010

Date



#### STANDARD PRICES FOR COST ESTIMATING

# CITY OF ROCKVILLE DEPARTMENT OF PUBLIC WORKS DECEMBER 2010

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#### Notes:

- 1. The unit costs contained on the following pages are for normal and customary installations. Where unusual circumstances exist, the unit costs must be adjusted to account for additional anticipated costs.
- 2. The unit costs are for materials and installation, unless otherwise noted.
- 3. The notation TBD = To Be Determined and indicates that the consultant must provide an industry accepted estimate as a standard unit has not been established.
- 4. The consultant must provide an industry accepted and current estimate for any materials that are approved and permitted by the City but not included in this document
- 5. Unit costs for storm drain structures and sewer manholes are assumed to be precast, unless otherwise noted. The Consultant must provide industry accepted and current estimates for any structures that are poured in place.

Section 1 Demolition, Utility Adjustments and Relocations

		UNIT
ITEM	UNIT	COST
Demolition		
Remove and Dispose of Concrete Curb and Gutter	LF	\$12.00
Remove and Dispose of Concrete Driveway Aprons	SY	\$12.00
Remove and Dispose of Asphalt Paving	SY	\$14.00
Remove and Dispose of Concrete/Asphalt Sidewalk	SY	\$12.00
Remove and Dispose of Piping	LF	\$20.00
Remove and Dispose of Concrete Headwalls	CY	TBD
Sawcut Existing Paving (does not include removal and disposal of paving)	LF	\$3.00
Remove and Dispose of Existing Manholes	EA	TBD
Remove and Dispose of Existing Storm Drain Inlets	EA	TBD
Remove and Dispose of Fire Hydrant	EA	\$2,000.00
Remove and Dispose of Guardrail/Concrete Barricade	LF	\$15.00
Remove and Dispose of Existing Pavement Markings, Any Width	LF	\$0.55
Remove and Dispose of Existing Pavement Marking Letters, Numbers, Symbols or		
Arrows	LF	\$0.55
Removal and Disposal of Individual Trees		
< 6" Diameter	EA	\$100.00
6"-12" Diameter	EA	\$300.00
>12"-24" Diameter	EA	\$750.00
>24"- 36" Diameter	EA	\$900.00
>36" Diameter	EA	\$1,500.00
Stump Removal Only - Under 30" diameter	EA	\$250.00
Stump Removal Only - Over 30" diameter	EA	\$450.00
Utility Adjustments and Relocations		
Vertically Adjust Sewer Manhole Top (first 6" only)	EA	\$400.00
Vertically Adjust Sewer Manhole (each additional 1" beyond first 6")	EA	\$250.00
Relocate Fire Hydrant	EA	\$2,500.00
Vertically Adjust Water Valve Box or Meter (first 6" only)	EA	\$400.00
Vertically Adjust Water Valve Box or Meter (each additional 1" beyond first 6")	EA	\$200.00
Horizontally Adjust Water Meter (along existing line only)	EA	\$600.00
Brace Utility Pole	EA	\$3,500.00
Miscellaneous	······································	
Test Pit, Hand Dug	CY	\$60.00
Remove and Dispose of Ex. Fence (Any Type)	LF	\$20.00
Remove and Replace Concrete Sidewalk	SY	\$57.00
Remove and Replace Driveway Apron	SY	\$82.00

Section 2 Sediment Control and Earthwork

ITEM	UNIT	UNIT COST
Earthwork		
Excavation (First 2000 CY)	CY	\$25.00
Excavation (Over 2000 CY)	CY	\$20.00
Excavation Hauled Off- Site	CY	\$25.00
Borrow	CY	\$25.00
Rock Excavation for Roadway	CY	\$50.00
Structural Fill	CY	\$30.00
Earthen Dike		
Type A-1, A-2	LF	\$5.00
Type A-3, A-4	LF LF	\$8.00
Type B-1, B-2		
Type B-3	LF LF	\$10.00 \$16.00
Турс Б-3	Lr_	\$10.00
Temporary Swale		
Type A-1, A-2	EA	\$4.00
Type A-3, A-4	EA	\$9.00
Type B-1, B-2	EA	\$12.00
Type B-3	EA	\$15.00
Inlet Protection		
For 5' Inlet	EA	\$125.00
For 10' Inlet	EA	\$200.00
For 15' Inlet	EA	\$300.00
For 20' Inlet	EA	\$300.00
For Yard Inlet	EA	\$300.00
Pipe Slope Drain (HDPE)		
12"	LF	\$20.00
15"	LF	\$25.00
18"	LF	\$30.00
24"	LF	\$35.00
36"	LF	\$40.00
Rip Rap Inflow/Outflow Protection (with Fabric)		
Outflow Protection at the end of a Berm or Swale	CY	\$65.00
Inflow Protection into a Trap or Basin	CY	\$65.00
Dewatering Device (includes CMP Riser, barrel, stone, filter fabric and connecting pipe)		
12" Riser, etc.	EA	\$1,000.00
18" Riser, etc.	EA	\$2,500.00
24" Riser, etc.	EA	\$5,000.00
30" Riser, etc.	EA	\$10,000.00
36" Riser, etc.	EA	\$12,000.00
42" Riser, etc.	EA	\$15,000.00

#### Section 2 (Cont.)

#### **Sediment Control and Earthwork**

ITEM	UNIT	UNIT COST
Stabilization		
Hydroseeding	SY	\$0.75
Solid Sodding		
(First 1,000 SY.)	SY	\$7.00
Solid Sodding		
(Excess Over 1,000 SY.)	SY	\$6.00
Temporary Seeding and Straw Mulching	SY	\$1.00
Erosion Matting	SY	\$2.50
Clear and Grubbing		
Clear and Grubbing - Light	Acre	\$8,000.00
Clearing and Grubbing - Medium	Acre	\$9,000.00
Clearing and Grubbing - Heavy	Acre	\$10,000.00
Miscellaneous		
Stabilized Construction Entrance (Community or Subdivision)	EA	\$1,750.00
Stabilized Construction Entrance (One Single Family)	EA	\$800.00
Stabilized Construction Entrance with Wash Rack	EA	\$2,000.00
Silt Fence	LF	\$4.00
Super Silt Fence	LF	\$8.00
Tree Protection Fence	LF	\$4.00
Welded Wire Safety Fence	LF	\$3.00
Root Pruning	LF	\$4.00
Sump Pit	EA	\$1,000.00
MSHA #2 Stone	CY	\$35.00
Temporary Class I Rip Rap for Sediment Control	TON	\$47.00
Temporary Class I Rip Rap for Sediment Control	CY	\$65.00
Sand Bag /Stone Diversion	LF	\$25.00
Stone Check Dam	EA	\$500.00
Filter Fabric	SY	\$5.00
Temporary Stream Crossing Bridge	EA	TBD
Sheeting and Shoring for Excavation (Depths below 10')	SF	TBD
Topsoil	CY	\$50.00
MSHA #57 Stone	CY	\$40.00
Asphalt Berm	LF	\$25.00
Portable Sediment Tank	EA	\$1,800.00

## Section 3 Stormwater Management and Stream Restoration

ITEM	UNIT	UNIT COST
Earthwork		
Excavation (First 2000 CY)	CY	\$25.00
Excavation (Over 2000 CY)	CY	\$20.00
Excavation Hauled Off- Site	CY	\$25.00
Dam Embankment	CY	\$40.00
Clay Core Trench/Liner	CY	\$50.00
Perforated PVC Underdrains (Includes cap and elbows)		
4"	LF	\$8.00
6"	LF	\$10.00
8"	LF	\$13.00
10"	LF	\$15.00
12"	LF	\$20.00
Trash Rack		
Anti - Vortex type - CMP Up to 24" Diameter	EA	\$500.00
Anti -Vortex type - CMP Over 24" Diameter	EA	\$1,000.00
Rebar Trash Rack on Concrete	EA	TBD
All other types	EA	TBD
Stream Valley Restoration		
Channel Excavation	CY	\$35.00
Imbricated Rip Rap	CY	\$150.00
Rock Vane	LF	\$150.00
Step Pools	SY	\$150.00
Rootwad	EA	\$500.00
Rock Cross Vane	LF	\$200.00
Stone Toe Protection	LF	\$55.00
Live Stake	EA	\$5.00
Brush Layering	SY	\$150.00
16" Natural Fiber Roll	LF	\$20.00
18" Natural Fiber Roll	LF	\$22.00
Live Facine	SY	\$30.00
Coir Fiber Matting	LF	\$5.00
Stream Diversion (Pump)	DAY	\$500.00
Other Stream Valley Stabilization Measures	TBD	TBD
Landscaping		
Wetlands Plants	EA	\$10.00
Shrubs - 2 or 3 Gallon Container	EA	\$35.00
Native Deciduous Trees - 2 1/2" Diameter	EA	\$300.00
Evergreen Trees - 6 feet	EA	\$175.00
Wetland Seed Mix	LB	\$200.00
Herbaceous Plants - 1 Gallon Container	EA	\$7.00
Mulch - Fine Shredded Hardwood	CY	\$60.00

#### Section 3 (Cont.)

#### Stormwater Management and Stream Restoration

ITEM	UNIT	UNIT COST
Biofiltration/Bioretention		
MSHA #7 Gravel Bed	CY	\$55.00
ASTM C33 Fine Aggregate Concrete Sand	CY	\$75.00
Planting Media - 1/3 perlite or Solite, 1/3 compost and 1/3 topsoil	CY	\$250.00
Mulch - Fine Shredded Hardwood	CY	\$60.00
Miscellaneous Stormwater Management		
Sub-Drains (Including 6" Pipe, Stone, and Filtercloth)	LF	\$20.00
Class I Rip Rap, ungrouted with filter fabric	CY	\$75.00
Class II Rip Rap, ungrouted with filter fabric	CY	\$100.00
Class III Rip Rap, ungrouted with filter fabric	CY	\$150.00
Gabions with filter fabric	CY	\$250.00
GrassCrete Pavers	SY	\$60.00
Topsoil	CY	\$50.00
Reinforced Concrete	CY	\$800.00
Concrete Anti-Seep Collar	EA	TBD
Filter Fabric	SY	\$5.00
Polyliner	SY	\$12.00
Gravel Bed	CY	\$75.00
Sand Filter Media	CY	\$75.00
Porous Pavers	SY	TBD
Pervious Concrete	SY	TBD
Proprietary SWM Measures (i.e. Baysavers, StormFilter, etc.)	EA	TBD
Dry Well (5' x 5' x 6')	EA	\$2,000.00

<sup>&#</sup>x27;December 2010

### Section 4 Storm Drainage

Storm Drainage ITEM	UNIT	UNIT COST
Curb Inlets		
MCDOT A-5 (up to 8' deep)	EA	\$3,100.00
MCDOT A-10 (up to 8' deep)	EA	\$3,500.00
MCDOT A-15 (up to 8' deep)	EA	\$4,500.00
MCDOT A-20 (up to 8' deep)	EA	\$5,500.00
MCDOT B-10 (up to 8' deep)	EA	\$3,500.00
MCDOT B-15 (up to 8' deep)	EA	\$4,000.00
MCDOT B-20 (up to 8' deep)	EA	\$4,500.00
Inlets (Greater Than 8') Per Additional Vertical Foot	VF	\$350.00
Manholes		<b>\$2.700.00</b>
A or B Manhole 48" Diameter (up to 8' deep)	EA	\$3,500.00
A or B Manhole 60" Diameter (up to 8' deep)	EA	\$4,800.00
A or B Manhole 72" Diameter (up to 8' deep)	EA	\$5,600.00
A or B Manhole 84" Diameter (up to 8' deep)	EA	\$6,000.00
A or B Manhole 96" Diameter (up to 8' deep)	EA	\$6,600.00
Manholes (Greater than 8') per Additional Vertical Foot	VF	\$350.00
Miscellaneous Structures		
MCDOT D Inlet (up to 8' deep)	EA	\$2,500.00
MCDOT E Inlet (up to 8' deep)	EA	\$3,000.00
MCDOT or MSHA J Inlet (up to 8' deep)	EA	\$3,000.00
WR Inlet (MD 374.21) (up to 8' deep)	EA	\$4,000.00
Inlets (Greater then 8') per Additional Vertical Foot	VF	\$350.00
RCP Class IV or V Pipe		<b>A</b> CO CO
15" Diameter	LF	\$60.00
18" Diameter	LF	\$70.00
21" Diameter	LF	\$80.00
24" Diameter	LF	\$90.00
27" Diameter	LF	\$110.00
30" Diameter	LF	\$120.00
33" Diameter	LF	\$130.00
36" Diameter	LF	\$140.00
42" Diameter	LF	\$175.00
48" Diameter	LF	\$200.00
54" Diameter	LF	\$230.00
60" Diameter	LF	\$250.00
66" Diameter	LF	\$280.00
72" Diameter	LF	\$300.00
Rubber Gasket for 15" - 24" (in addition to pipe cost)	LF	\$10.00
Rubber Gasket for 27" to 42" (in addition to pipe cost)	LF	\$20.00
Rubber Gasket for 48" - 72" (in addition to pipe cost)	LF	\$30.00

#### Section 4 (Cont.)

#### Storm Drainage

ITEM	UNIT	UNIT COST
CMP Pipe (16 Gauge)		
12" Diameter	LF	\$35.00
15" Diameter	LF	\$40.00
18" Diameter	LF	\$45.00
21" Diameter	LF	\$55.00
24" Diameter	LF	\$60.00
30" Diameter	LF	\$70.00
36" Diameter	LF	\$80.00
42" Diameter	LF	\$110.00
48" Diameter	LF	\$130.00
54" Diameter	LF	\$150.00
60" Diameter	LF	\$170.00
66" Diameter	LF	\$210.00
72" Diameter	LF	\$250.00
78" Diameter	LF	\$300.00
84" Diameter	LF	\$375.00
Perforated CMP/PI - Additional Cost per LF	LF	\$5.00
CMPA Pipe		
18" X 11" (Equiv. 15")	LF	\$40.00
22" X 13" (Equiv. 18")	LF	\$50.00
25" X 16" (Equiv. 21")	LF	\$60.00
29" X 18" (Equiv. 24")	LF	\$70.00
36" X 22" (Equiv. 30")	LF	\$80.00
43" X 27" (Equiv. 36")	LF	\$95.00
50" X 31" (Equiv. 42")	LF	\$115.00
58" X 36" (Equiv. 48")	LF	\$150.00
Concrete Box Culverts		
Any size	Y F	TDD
Any size	LF LF	TBD
PVC Pipe for Storm Drainage		
4"	LF	\$15.00
6"	LF	\$20.00
8"	LF I	\$25.00
10"	LF	\$30.00
12"	LF	\$35.00
15"	LF	\$40.00
18" to 24"	LF	\$50.00
Perforated PVC- Additional Cost per LF	LF	\$3.00

#### Section 4 (Cont.)

#### Storm Drainage

HDPE Pipe 12" 15" 18"	LF	UNIT COST
12" 15" 18"	LF	
18"		\$40.00
18"	LF	\$45.00
	LF	\$50.00
24"	LF	\$60.00
36"	LF	\$80.00
42"	LF	\$95.00
48"	LF	\$100.00
54"	LF	\$120.00
		ψ120.00
Field Connections		
15" Diameter to 27" to 42" Diameter	EA	\$1,000.00
15" Diameter to 48" or 54" Diameter	EA	\$2,000.00
15" Diameter to 60" or 66" Diameter	EA	\$2,500.00
18" Diameter to 60", 66" or 72" Diameter	EA	\$3,000.00
24" Diameter to 60", 66' or 72" Diameter	EA	\$3,500.00
Concrete End Wall "C"		
15" Diameter	EA	\$1,200.00
18" Diameter	EA	\$1,400.00
21" Diameter	EA	\$1,600.00
24" Diameter	EA	\$1,800.00
27" Diameter	EA	\$2,200.00
30" Diameter	EA	\$2,500.00
33" Diameter	EA	\$2,750.00
36" Diameter	EA	\$3,500.00
42" Diameter	EA	\$4,000.00
48" Diameter	EA	\$4,500.00
54" Diameter	EA	\$5,500.00
60" Diameter	EA	\$6,000.00
66" Diameter	EA	\$7,000.00
72" Diameter	EA	\$8,000.00
SHA Type Endwall "F"		
15" Diameter	EA	\$1,650.00
18" Diameter	EA	\$1,850.00
21" Diameter	EA	\$2,000.00
24" Diameter	EA	\$2,200.00
27" Diameter	EA	\$2,500.00
30" Diameter	EA	\$3,000.00
33" Diameter	EA	\$3,500.00
36" Diameter	EA	\$4,000.00
42" Diameter	EA	\$4,500.00
48" Diameter	EA	\$5,000.00
54" Diameter	EA	\$5,500.00
60" Diameter	EA	\$9,000.00
66" Diameter	EA	\$12,000.00
72" Diameter	EA	\$15,000.00

#### Section 4 (Cont.)

#### Storm Drainage

ITEM	UNIT	UNIT COST
Concrete End Section		
15" Diameter	EA	\$500.00
18" Diameter	EA	\$550.00
21" Diameter	EA	\$600.00
24" Diameter	EA	\$650.00
27" Diameter	EA	\$700.00
30" Diameter	EA	\$750.00
33" Diameter	EA	\$800.00
36" Diameter	EA	\$900.00
42" Diameter	EA	\$1,000.00
48" Diameter	EA	\$1,500.00
CMP End Section		
12" Diameter	EA	\$300.00
15" Diameter	EA EA	\$300.00 \$400.00
18" Diameter	EA	\$425.00
21" Diameter	EA	\$423.00
24" Diameter	EA	\$430.00
27" Diameter	EA	\$500.00
30" Diameter	EA	\$550.00
33" Diameter	EA	\$600.00
36" Diameter	EA	\$650.00
42" Diameter	EA	\$700.00
	L.71 X	\$700.00
CMPA End Section		
18" X 11" to 29" X 18" (Equiv. 15" to 24" Round)	EA	\$450.00
36" X 22" to 50" X 31" (Equiv. 27" to 48" Round)	EA	\$600.00
HDPE End Section		
4" to 12" Diameter	EA	\$100.00
15" to 24" Diameter	EA	\$150.00
26" to 42" Diameter	EA	\$200.00
48" to 54" Diameter	EA	\$300.00
TO TO 34 DIAMETER	LA	\$300.00
Rip Rap and Gabion		
Class I Rip Rap, ungrouted with filter fabric	CY	\$75.00
Class II Rip Rap, ungrouted with filter fabric	CY	\$100.00
Class III Rip Rap, ungrouted with filter fabric	CY	\$150.00
Gabions with filter fabric	CY	\$250.00
Trench Drain		
Precast Trench Drain with grate	TBD	TBD
	100	100
Miscellaneous		
Borrow Trench Backfill	CY	\$40.00
Renovate Existing Inlet into Manhole	EA	TBD
Concrete Cut-off Wall (for pipes 12" to 15" diameter)	EA	\$500.00
Concrete Cut-off Wall (for pipes 18" to 24" diameter)	EA	\$750.00

Section 5 Water and Sewer

Water Line  " DIP Water Main (CL52)  " DIP Water Main (CL50)  " DIP Water Main (CL50)  0" DIP Water Main (CL50)  2"DIP Water Main (CL50)  " Copper Water House Connections  " Copper Water House Connections  Fire Hydrants  Low Cradle, Encasement, or Blocking  Water Valves  " " ""	LF LF LF LF LF EA CY	\$100.00 \$130.00 \$135.00 \$140.00 \$150.00 \$30.00 \$45.00 \$4,500.00
"" DIP Water Main (CL52) "" DIP Water Main (CL50) "" DIP Water Main (CL50) 0" DIP Water Main (CL50) 2"DIP Water Main (CL50) "" Copper Water House Connections "" Copper Water House Connections Fire Hydrants Low Cradle, Encasement, or Blocking  Water Valves  "" "" "" "" "" "" "" "" "" "" "" "" "	LF LF LF LF LF LF	\$130.00 \$135.00 \$140.00 \$150.00 \$30.00 \$45.00 \$4,500.00
"" DIP Water Main (CL52) "" DIP Water Main (CL50) 0" DIP Water Main (CL50) 2"DIP Water Main (CL50) " Copper Water House Connections " Copper Water House Connections Fire Hydrants Low Cradle, Encasement, or Blocking  Water Valves  "" ""	LF LF LF LF EA	\$130.00 \$135.00 \$140.00 \$150.00 \$30.00 \$45.00 \$4,500.00
0" DIP Water Main (CL50) 2"DIP Water Main (CL50) " Copper Water House Connections " Copper Water House Connections Fire Hydrants Low Cradle, Encasement, or Blocking  Water Valves " ""	LF LF LF LF EA	\$140.00 \$150.00 \$30.00 \$45.00 \$4,500.00
0" DIP Water Main (CL50) 2"DIP Water Main (CL50) " Copper Water House Connections " Copper Water House Connections Fire Hydrants Low Cradle, Encasement, or Blocking  Water Valves " ""	LF LF LF EA	\$150.00 \$30.00 \$45.00 \$4,500.00
"Copper Water House Connections "Copper Water House Connections "Tre Hydrants Low Cradle, Encasement, or Blocking  Water Valves """	LF LF EA	\$30.00 \$45.00 \$4,500.00
Copper Water House Connections Fire Hydrants Low Cradle, Encasement, or Blocking  Water Valves  17  17  17  17  17  17  17  17  17  1	LF EA	\$45.00 \$4,500.00
Fire Hydrants  Low Cradle, Encasement, or Blocking  Water Valves  4"  5"	EA	\$4,500.00
Low Cradle, Encasement, or Blocking  Water Valves  ""  ""  ""		<del></del>
Water Valves	CY	\$600.00
t" ,"		
t" ,"		l
S <sup>II</sup>	4	
	EA	\$1,200.00
	EA	\$1,500.00
3"	EA	\$1,750.00
2"	EA	\$2,800.00
6"	EA	\$4,000.00
8"	EA	\$5,000.00
24"	EA	\$8,000.00
Wet Taps		
Wet Taps Up to 12" Diameter	EA	\$4,000.00
Wet Taps Over 12" Diameter, Under 24" Diameter	EA	\$7,000.00
Wet Tap 24" Diameter	EA	\$10,000.00
Sewer Line		
3" PVC Sewer Main	LF	\$50.00
10" PVC Sewer Main	LF	\$70.00
12" PVC Sewer Main	LF	\$110.00
15" PVC Sewer Main	LF	\$130.00
4" PVC Sewer House Connection	LF	\$35.00
5" PVC Sewer House Connection	LF	\$40.00
Pressure Sewer		
1 1/4" to 2"	LF	\$30.00
2" to 3"	LF	\$35.00
1 1/4" to 2" Pressure House Connection	LF	\$30.00
Sewer Manholes		
48" Diameter - 8' or Less	EA	\$4,250.00
48" Diameter, Each Vertical Foot Over 8' of Depth	VF	\$350.00
60" Diameter - 8' or Less	EA	\$4,500.00
60" Diameter, Each Vertical Foot Over 8' of Depth	VF	\$500.00
Drop Manhole	EA	\$5,000.00
Fransition Manhole	EA	\$3,300.00
Flushing Manhole for Pressure Sewer	EA	\$4,900.00

#### Section 6

#### **Paving**

ITEM	UNIT	UNIT COST
Milling		
Milling Asphalt Paving to 1.5" Depth (Less than 1,000 SY)	SY	\$15.00
Milling Asphalt Paving to 1.5" Depth (1,000 SY to 5,000 SY)	SY	\$10.00
Milling Asphalt Paving to 1.5" Depth (Greater than 5,000 SY)	SY	\$5.00
Sawcut Existing Paving (does not include removal and disposal of paving)	LF	\$3.00
Roadway Excavation		
Road Excavation (First 2000 CY.)	CY	\$25.00
Road Excavation (Excess Over 2000 CY.)	CY	\$20.00
Excavation Hauled Off-Site	CY	\$25.00
Borrow	CY	\$25.00
Rock Excavation for Roadway	CY	\$50.00
Structural Fill	CY	\$30.00
Paving		
MSHA Asphalt Base (300 tons or less)	TON	\$100.00
MSHA Asphalt Base (Greater than 300 tons)	TON	\$90.00
MSHA Asphalt Surface(300 tons or less)	TON	\$110.00
MSHA Asphalt Surface (Greater than 300 tons)	TON	\$100.00
2" Bituminous Concrete Surface Course	SY	\$13.00
3" Bituminous Concrete Surface Course in 2" - 1 1/2" layers	SY	\$19.00
3" Bituminous Concrete Base Course	SY	\$17.00
5" Bituminous Concrete Base Course	SY	\$28.00
7" Bituminous Concrete Base Course	SY	\$40.00
9" Bituminous Concrete Base Course in 2" - 4 1/2 " layers	SY	\$51.00
8" Graded Aggregate Base Course in 2" - 4" layers	SY	\$14.00
4" Graded Aggregate Base Course	SY	\$6.00
MSHA Graded Aggregate Base	CY	\$50.00
MSHA 9" Concrete Paving	SY	\$100.00
Curb and Gutter		
MC Type-A Concrete Curb & Gutter	LF	\$25.00
MSHA Type "A" & "B" Concrete Curb	LF	\$25.00
Temporary M.C. Std. 10-E Asphalt Curb	LF	\$20.00
Monolithic Concrete Median - 4 feet wide	LF	\$50.00

#### Section 6 (Cont.)

#### **Paving**

ITEM	UNIT	UNIT COST
Sidewalk and Ramps		
MC Std. 4" Thick Concrete Sidewalk	SY	\$40.00
MC Std. 5" Thick Concrete Sidewalk	SY	\$45.00
Sidewalk Ramp	SY	\$70.00
Brick Sidewalk (with Concrete Base and 1" Sand Bed)	SY	\$90.00
Detectable Warning Surface for Sidewalk Ramps	SF	\$35.00
Temporary 4" Asphalt Sidewalk	SY	\$20.00
MSHA Asphalt Base for Bikeway	TON	\$110.00
MSHA Asphalt Surface for Bikeway	TON	\$125.00
MSHA Asphalt Base for Bikeway 1" Thick	SY	\$8.00
MSHA Asphalt Surface for Bikeway 1" Thick	SY	\$10.00
Driveways		
City Std. 7" Thick Concrete Drive Apron (Residential)	SY	\$60.00
City Std. 9" Thick Concrete Drive Apron (Commercial)	SY	\$70.00
Residential Asphalt Driveway Apron	SY	\$40.00
Miscellaneous		
Solid Sodding (First 1,000 SY.)	SY	\$7.00
Solid Sodding (Excess Over 1,000 SY.)	SY	\$6.00
Install 2-1/2" Street Trees	EA	\$300.00

Section 7 Traffic Signals, Signage, Striping, Lighting and Maintenance of Traffic

ITEM	UNIT	UNIT COST
Traffic Signal Construction		***************************************
12" One-Way 3 Section (R,Y,G)	EA	\$1,100.00
5 Section LED Traffic Signal Housing	EA	\$1,600.00
Econolite Traffic Signal Cabinet With Equipment	EA	\$11,500.00
Video Detection Camera	EA	\$8,000.00
Video Detection Control Cabinet - 500Feet	EA	\$2,050.00
6' x 6' Loop Detector	EA	\$1,100.00
6' x 22' Loop Detector	EA	\$1,400.00
6' x 30' Loop Detector	EA	\$1,600.00
Traffic Signal Cabinet (NEMA Size 6)	EA	\$3,700.00
Countdown Pedestrian Signal Head	EA	\$550.00
2 Wire Central Control Unit	EA	\$2,000.00
Audible Push Button and Braille Sign	EA	\$800.00
Electrical Cable - 5 Conductor (no. 14AWG)	LF	\$3.00
Metered Service Pedestal	EA	\$2,400.00
2" Schedule 80 Rigid PVC Conduit (Bored)	LF	\$40.00
2" Schedule 80 Rigid PVC Conduit (Trenched)	LF	\$13.00
3" Schedule 80 Rigid PVC Conduit (Bored)	LF	\$50.00
3" Schedule 80 Rigid PVC Conduit (Trenched)	LF	\$15.00
4" Schedule 80 Rigid PVC Conduit (Bored)	LF	\$55.00
4" Schedule 80 Rigid PVC Conduit (Trenched)	LF	\$20.00
Standard Handbox in Earth	EA	\$1,000.00
Standard Handbox in Sidewalk	EA	\$2,000.00
20' Lighting Bracket Arm for Traffic Signal Structure	EA	\$1,000.00
21' Steel Pole with Single 38' Mast Arm	EA	\$6,500.00
21' Steel Pole with Single 50' Mast Arm	EA	\$7,500.00
21' Steel Pole and 70' Mast Arm	EA	\$10,100.00
12' x 30' Strain Pole (on Existing Base)	EA	\$3,500.00
3/8" Span Wire	LF LF	\$5,00
Concrete for Signal Foundation	CY	\$1,000.00
Traffic Sign on Span Wire		\$1,000.00
Solar Powered School Beacon	EA	
Solal Foweled School Beacon	EA	\$13,000.00
Pavement Marking		
4" White Painted Markings	LF	\$0.35
5" White Painted Markings	LF	\$0.40
4" Yellow Painted Markings	LF	\$57.00
5" Yellow Painted Markings	LF	\$82.00
June 1, 2009	LF	\$4.00
4" Yellow Marking Thermoplastic Tape	LF LF	\$4.00
12" Yellow Marking Thermoplastic Tape	LF LF	\$10.00
4" White Lead Free Reflective Thermoplastic Marking	LF	\$2.00
5" White Lead Free Reflective Thermoplastic Marking	LF	\$3.00
12" White Heat Applied Preformed Thermoplastic Marking	LF LF	\$9.00
24" White Heat Applied Preformed Thermoplastic Marking	LF LF	\$14.00
24" Yellow Marking Thermoplastic Tape	LF LF	\$20.00
Thermoplastic Pavement Marking, Symbols or Arrows	EA EA	
Thermoplastic Pavement Marking, Symbols of Arrows  Thermoplastic Pavement Marking, Letters or Numbers	EA	\$260.00
Thermophastic Favement Marking, Letters of Numbers	EA	\$105.00

#### Section 7 (Cont.)

#### Traffic Signals, Signage, Striping, Lighting and Maintenance of Traffic

EA EA	\$175.00
	\$175.00
EA	
	\$150.00
SF	\$26.00
EA	\$1,400.00
EA	\$1,600.00
EA EA	\$2,500.00
	\$5,000.00
	\$6,000.00
	\$2,000.00
EA	\$6,000.00
***************************************	
EA	\$8.00
DAY	\$350.00
SY	\$30.00
LF	\$35.00
DAY	\$1,200.00
DAY	\$350.00
Hour	\$17.50
SF	\$26.00
DAY	\$4.00
LF	\$0.25
CY	\$60.00
	EA EA EA EA EA EA EA DAY SY LF DAY Hour SF DAY LF

Section 8 Miscellaneous Site Work

ITEM	UNIT	UNIT COST
Retaining Walls		
Interlocking Concrete Block, less than 4 feet in height	LF	TBD
Interlocking Concrete Block, greater than 4 feet in height	LF	TBD
Reinforced Concrete, poured in place, any height	CY	\$800.00
Reinforced Concrete Brick Faced-4' Max Height	LF	TBD
Metal Railing	LF	TBD
Miscellaneous		
M.C. Std. Wood Barricade Posts	EA	\$85.00
Chain Link Fencing (48" High)	LF	\$15.00
Chain Link Fence (60" High)	LF	\$16.00
Chain Link Fencing (72" High)	LF	\$18.00
Chain Link Fencing (96" High)	LF	\$24.00
Chain Link Fencing (120" High)	LF	\$30.00
Topsoil	CY	\$50.00
Concrete Jersey Barrier	LF	\$32.00
Set Residential Property Corner	EA	\$300.00
Unfinished Concrete	CY	\$600.00
Mobilization (Construction Cost \$100K - \$500K)	LS	\$10,000.00
Mobilization (Construction Cost \$500K to \$1000K)	LS	\$20,000.00
Mobilization (Construction Cost \$1000K to \$1500K)	LS	\$30,000.00
Boring and Jacking for Pipe	LF	TBD
Flowable Fill for Pipe and Structure Backfill	CY	\$110.00
Reinforced Concrete, poured in place	CY	\$800.00
Wheel Stops (Conc. with Anchors, Installed)	EA	\$80.00
"W" Steel Guard Rail or Barricade, using 6 foot posts	LF	\$35.00